

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Beatty et al.	Examiner:	D. McCrosky	
Serial No.:	09/547,543	Group Art Unit:	3736	
Filing Date:	4/12/2000	Docket No.:	1931	
Title	Method of Mapping I	Method of Mapping Heart Electrophysiology		

Date of Deposit:

I hereby certify that this paper it being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231

Signature:

Printed Name: Robert C. Beck

**Amendment** 

TECHNOLOGY CENTER R3700

Assistant Commissioner for Patents Washington, DC 20231

This is responsive to the outstanding Office Action mailed September 23, 2002, and identified as paper number 4. Reconsideration and allowance of this application is respectfully solicited in view of the following amendments and remarks.

Please amend the above-identified application for patent as follows:

Replace the first paragraph with the following:

--This application is a divisional of Ser. No. 09/005,105, filed Jan. 9, 1998 which is a divisional application of Ser. No. 08/387,832, filed May 26, 1995, now U.S. Pat. No. 6,240,307 which is a national stage application of PCT/US93/09015, filed Sept. 23,1992, 3 which in turn claims priority from U.S.S.N. 07/950,448, filed Sept. 23, 1993, now U.S. Pat. No. 5,29(1)549 and U.S.S.N. 07/949,690, filed Sept. 23, 1992, now U.S. Pat.No. 5,311,866. Appl/cants claim priority to: 08/387,832, filed May 26, 1995, now U.S. Pat. No.

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6,240,307; Ser. No. 08/376,067 filed Aug. 20 1995, now U.S. Pat. No. 5,553,611; and Ser. No. 08/178,128 filed Jan. 6, 1994, now abandoned.--

Kindly cancel claim 1 and rewrite claim 3 as follows:

1. A process for measuring electrophysiologic data in a heart chamber comprising the steps of:

positioning a set of passive electrodes within a patient's heart;

positioning a set of active electrodes within a patient's heart;

supplying oscillating current to said set of active electrodes thereby generating an electric field in said heart chamber;

detecting said electric field at said passive electrode sites, generating a set of electric field measurement data;

extracting in the frequency domain, from said field measurement data, that component of said field measurement data corresponding to chamber geometry and generating chamber geometry data;

extracting in the frequency domain, from said field measurement data, that component of said field measurement data corresponding to the underlying intrinsic electrophysiologic activity of the heart chamber, and generating electrophysiology data; graphically displaying said chamber geometry data; and graphically displaying said electrophysiologic data.

2. A process for measuring electrophysiologic data in a heart chamber comprising the steps of:

positioning a set of passive electrodes within patient's heart;

positioning a set of active electrodes within a patient's heart;

supplying oscillating current to said set of active electrodes thereby generating an electric field in said heart chamber;

detecting said electric field at said passive electrode sites, generating a set of field measurement data;

extracting in the time domain, from said field measurement data, that component of said field measurement data corresponding to the underlying electrophysiologic activity of the heart chamber, and generating electrophysiology data;